



## Senior Mechanical Engineer

### Company Description

Control Solutions Inc. is a small, dynamic, and rapidly growing company located in Aurora, Illinois. Our corporate slogan "INNOVATIVE SOLUTIONS FOR A WORLD IN MOTION" goes a long way in describing who we are. We design and manufacture a wide range of embedded controllers and control systems typically for motion control applications. We have standard products in motor control, battery chargers, and medical devices, but our forte is designing custom control systems for a wide range of applications. A high percentage of our products are used in the personal mobility market, medical applications and military applications. We take pride in the fact that we are highly successful in designing and manufacturing our products in America. We are also fast-to-market with a "can do" and positive attitude.

We provide competitive salaries, medical benefits, and a 401K plan with employer participation.

### Position Description

The Senior Mechanical Engineer is responsible for all aspects associated with the mechanical engineering design of products from concept and prototypes through production introduction. Areas of responsibility shall include the selection and/or design of electro-mechanical components and systems according to industry standards, particularly military ones. This full time, first shift position includes but is not limited to the following responsibilities:

- Design and model electromechanical components and systems. Electromechanical components include enclosures, brackets, cabling assemblies, connectors, switches, among others. Systems include mechanisms, sensors, motors, hydraulics, linear actuators, among others.
- Select and/or design mechanical hardware components such as fasteners, latches, clips among others.
- Must use ProE for CAD model and design. Use other advanced simulation programs, such as ProE Mechanism, when applicable.
- Perform static, dynamic, vibration, thermal, and other engineering analysis on mechanisms and other systems.
- Design to pass military qualifications and reliability requirements, specifically vibration and thermal testing (MIL-STD-781 and 810F).
- Help implement in-house pre-qualification capabilities and testing lab.
- Lead and manage qualification testing with outside testing facilities.
- Include manufacturability and cost in engineering analysis.
- Use DFMEA (Design Failure Mode Effects Analysis) and/or other process tools when applicable.
- Lead projects and work and coordinate work with vendors and customers.
- Design and perform experiments applying statistics.
- Specify materials and finishes to designed components for successful fabrication.
- Support materials in selecting and purchasing mechanical parts.
- Review and help build prototypes and pilot production units.

### Education Requirement

- Bachelor's degree in mechanical engineering.

### Experience Requirement:

- Seven or more years of hands-on experience developing and launching electro-mechanical products, preferable in military or automotive industries.
- Proficiency in CAD, ProE strongly preferred.
- Strong understanding of design for manufacturability and familiarity with six-sigma tools preferred.
- Strong analytical and problem solving skills.
- Proficiency with Microsoft Office package and use of Microsoft Project or equivalent package.
- Experience designing, selecting, and using electromechanical components.
- Ability to work both independently and in a team environment on a variety of products.

If you feel you meet these requirements, please forward your resume to [employment@controls.com](mailto:employment@controls.com) with "Senior Mechanical Engineer" in the subject. Also include salary history and/or salary requirements. Control Solutions, INC is an EOE M/F/D/V employer. No phone calls or third parties please.